Reply to Office action of August 3, 2007

## **REMARKS**

In response to the advisory action mailed December 11, 2007, applicants file herewith an amendment of the claims that correspond essentially to the claims considered by the examiner in connection with the unentered November 30, 2007 after-final amendment, but with slight changes to the wording of the overlay composition. The same issues presented by the November 30 amendment are present in this amendment.

## Claim Rejections Under 35 U.S.C. §103(a):

Applicants respectfully traverse the rejection of claims 1-8 as being obvious over Huhn (U.S. 2001/0016267, referred to hereafter as the '267 publication). Applicants have amended claim 1 to more clearly recite patentable subject matter over the '267 publication, and thus, believe the rejection should be withdrawn.

Claim 1, as amended, recites a composite multilayer material having a backing layer, a bearing metal layer of a copper alloy or an aluminum alloy, an intermediate layer and an overlay. The overlay consists of about 0 - 20 wt.% of at least one of copper or silver, the rest being tin. The intermediate layer is a single layer of nickel in direct contact with the bearing metal layer and the overlay. The layer thickness of the intermediate nickel layer being greater than 4 µm as applied to said bearing metal layer.

In contrast, the '267 publication discloses a bearing metal layer applied to a steel backing layer, with a <u>first intermediate layer</u> of nickel applied to the bearing metal layer and a <u>second intermediate layer</u> applied to the first intermediate layer. The first intermediate layer of nickel is preferably from 1 to 4µm (paragraph [0030]). The second intermediate layer <u>consists of nickel and tin</u> electrodeposited on the first intermediate layer. The second intermediate layer is preferably between 2 and 7µm. The ratio of nickel to tin in the second intermediate layer corresponds approximately to an atomic ratio of 1:1. A tin-based overlay is then electrodeposited on the nickel-tin intermediate layer. The thickness of the overlay is preferably from 5 to 25µm. The first intermediate nickel layer contributes to the equilibrium-determined growth of the second intermediate tin-nickel layer, in that the tin-nickel layer is not only fed with tin from the overlay, but also with nickel from the first intermediate layer. As such, the 1:1 ratio of tin to nickel in the second intermediate tin-nickel layer is maintained (paragraph [0030]). Applicants

Appln. No.: 10/568,110

Reply to Office action of August 3, 2007

contend that their claimed composite multilayer material can not be viewed as obvious over the '267 publication, in that Applicants require a single intermediate layer rather than the required first and second intermediate layers in the '267 publication. The '267 publication sets the stage in paragraphs [0008] and [0009] for single intermediate layer bearing designs as providing low hardness with only limited load carrying capacities. As such, one skilled in the art would not be directed by the '267 publication toward a single layer intermediate layer as claimed by Applicants. As such, the problem solved by the '267 publication addresses overcoming the drawbacks of bearing materials having a single intermediate layer of nickel.

Accordingly, Applicants believe amended claim 1 to define patentable subject matter and to be in proper form for allowance. Such action is respectfully requested.

Claims 2-8 are ultimately dependant upon independent claim 1, and thus, are believed to define patentable subject matter for at least the same reasons and to be in proper form for allowance. Such action is respectfully requested. The amendments made to claims 2 and 3 clarify the composition of the overlay as including at least copper or silver in the amount recited, such that either copper or silver or both copper and silver can be included. No new matter has been added.

It is believed that this application now is in condition for allowance. Further and favorable action is requested.

The Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 04-1061.

Respectfully submitted,

**DICKINSON WRIGHT PLLC** 

January 7, 2008 /Robert L. Stearns/

Date

Robert L. Stearns, Registration No. 36,937

38525 Woodward Avenue, Suite 2000 Bloomfield Hills, Michigan 48304-2970 (248) 433-7382

5